



The G.K. Batchelor Prize and The Rodney Hill Prize

The G.K. Batchelor Prize in Fluid Mechanics

The G.K. Batchelor Prize, sponsored by Journal of Fluid Mechanics, is an award of US\$25,000 in recognition of outstanding research in the field of fluid mechanics. The prize is presented every 4 years at the ICTAM congress. The recipient of the prize will deliver a lecture at the ICTAM congress and this will also be published in Journal of Fluid Mechanics and be made freely available on the Cambridge Journals website. A selection committee whose members are internationally distinguished in fluid mechanics will award the prize.

G.K. Batchelor was a leading figure in fluid mechanics throughout the latter half of the 20th century. He will be particularly remembered for his pioneering work on homogeneous turbulence, turbulent diffusion, and the dynamics and rheology of suspensions of small particles, areas requiring deep probabilistic thought and methods. There are also many topics in laminar fluid mechanics that bear Batchelor's imprint and name. He also had an exceptional impact on the field through the institutions that he created: the Department of Applied Mathematics and Theoretical Physics at Cambridge in 1959, which he led for 24 years; Euromech, which he co-founded in the mid 1960s, and chaired for over 20 years; and the Journal of Fluid Mechanics which he founded in 1956, and edited for 42 years! He also served IUTAM as Secretary of its Congress Committee in the early 1960s and as a member of its General Assembly for more than 25 years. It is particularly appropriate that the fluid mechanics prize sponsored by the Journal of Fluid Mechanics should bear his name.



The G.K. Batchelor Prize for 2012 is awarded to Professor **Detlef Lohse** of the Technical University of Twente, the Netherlands. Professor Lohse receives the prize for his outstanding research on a wide range of fundamental fluid mechanics, including bubble sonoluminescence, turbulent convection, multiphase flow and microfluid dynamics, and for technological applications. Using innovative laboratory experiments, coupled with theoretical and numerical calculations, Professor Lohse has made significant advances that have provided new understanding of the underlying physics of these many different flows.

The Rodney Hill Prize in Solid Mechanics

The Rodney Hill prize, sponsored by Elsevier, is to be awarded in recognition of outstanding research in the field of solid mechanics. The prize is to consist of a plaque and a check for US\$25,000. The prize is to be awarded every 4 years, to coincide with the quadrennial International Congress of Theoretical and Applied Mechanics (ICTAM). The first prize was awarded at the ICTAM 2008 in Adelaide.

Dr. Rodney Hill is widely regarded as among the foremost contributors to the foundations of solid mechanics over the second half of the 20th century. His early work was central to founding the mathematical theory of plasticity. This deep interest led eventually to general studies of uniqueness and stability in nonlinear continuum mechanics, work which has had a profound influence on the field of solid mechanics—theoretical, computational and experimental alike—over the past decades. Hill was the founding editor of the *Journal of the Mechanics and Physics of Solids*, still among the principal journals in the field. His work is recognized worldwide for the spare and concise style of presentation and for its exemplary standards of scholarship. It is a fitting tribute that the solid mechanics prize sponsored by Elsevier Ltd. bear his name.



The Rodney Hill Prize for 2012 is awarded to Professor **Huajian Gao** of Brown University, USA. Professor Gao receives the prize for his deep and broad scientific achievements in basic solid mechanics and its bridge to other fields, which has re-defined the modern frontiers of mechanics research. His work includes fundamental theory as well as applications to materials science, nanotechnology, and bioengineering. His highly cited publications appear not only in the major solid mechanics journals but also in many high-profile, cross-disciplinary journals.